University of California, Berkeley Physics H7C, Fall 2002 (Strovink)

General Information (updated 17 Nov 02)

Web site for this class: http://dolbln.lbl.gov/h7cf02-web.htm
http://dolblc.lbl.gov/h7cf02-web.htm

Fall 1999 H7C web site: http://dolbln.lbl.gov/h7abc.htm. Linked are all 1999 handouts, assignments, exams, and solutions. The latter (by 1999 GSI Derek Kimball) are excellent for self-study.

Instructors: Prof. Mark Strovink, 437 LeConte; (LBL) 486-7087; (home, before 10) 486-8079; (UC) 642-9685. Email: strovink@lbl.gov. Web: http://d0lbln.lbl.gov/. Office hours: M 3:15-4:15, Th 1:15-2:15. Mr. Ilya Osipenkov, (LBL) 486-6119; (home, before 2 AM) 925-938-4551. Email: osipenkov_ilya@hotmail.com. Office hours (to be held in 262 LeConte): Th 11:15-12:15, 4-5. You may also obtain help in the 7C Course Center, 262 LeConte.

Lectures: Tu-Th 9:40-11 in 3 LeConte. Lecture attendance is essential, since not all of the course content can be found in the texts or handouts. (Please note that the lecture normally scheduled for Th 12 Sep instead will be given on M 16 Sep at 5:10-6:30 PM in 308 LeConte.)

Labs: Begin in the third week, in 278 LeConte. As soon as possible, please enroll in any one of the 7C lab sections that fits your schedule.

Discussion Sections: Taught by Mr. Osipenkov. Begin immediately in the first week. **Section 1**: W 11:10-12 in 118 Barrows. **Section 2**: Th 5:10-6 in 333 LeConte (first two weeks) and 343 LeConte thereafter. You are welcome at either or both sections. You are especially encouraged to attend discussion section regularly. There you will learn techniques of problem solving, with particular application to the assigned exercises.

Texts (required): Bernstein, Fishbane, and Gasiorowicz, **Modern Physics** (Prentice-Hall, 2000); Fowles, **Introduction to Modern Optics**, *Second Edition* (Dover paperback, 1989).

Problem Sets: Eleven problem sets are assigned and graded. Solutions are available on the course web site. Problem sets are due on Friday at 5 PM in weeks during which there is no exam or Thanksgiving holiday, beginning in week 2. Deposit problem sets in the green box labeled "H7C" in 262 LeConte. You are encouraged to attempt all the problems. Students who do not do them find it almost impossible to learn the material and to succeed on the examinations. Discuss these problems with your classmates as well as with the teaching staff; however, when the time comes to write up your solutions, *work independently*. Credit for collective writeups, which are easy to identify, will be divided among the collectivists. Late papers will not be graded. Your lowest problem set score will be dropped, in lieu of due date extensions for any reason.

Syllabus: H7C has one syllabus card that you are required to purchase. It will be collected when the second midterm examination is handed back in lecture. This card pays for the 7C laboratory experiment descriptions and instructions.

Exams: There will be two 80-minute midterm examinations and one 3-hour final examination. Before confirming your enrollment in this class, please check that its final Exam Group 7 does not conflict with the Exam Group for any other class in which you are enrolled. Please verify that you will be available for the midterm examinations (Th 10 Oct and Th 7 Nov, 9:40-11), and for the final examination, F 13 Dec, 8-11 AM. Except for unforeseeable emergencies, it will not be possible for the midterm or final exams to be rescheduled. Passing H7C requires passing the final exam.

Grading: 30% midterms; 25% problem sets; 40% final exam; 5% lab. Grading is not "curved" -- it does not depend on your performance relative to that of your H7C classmates. Rather it is based on comparing your work to that of 1.5 generations of earlier lower division Berkeley physics students, with due allowance for educational trends and for the Honors nature of this course.